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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/817,375	04/02/2004	Takumi Yamauchi	4041K-000194	2556
27572	7590	11/16/2005	EXAMINER	
HARNESS, DICKEY & PIERCE, P.L.C. P.O. BOX 828 BLOOMFIELD HILLS, MI 48303			JIMENEZ, MARC QUEMUEL	
			ART UNIT	PAPER NUMBER
			3726	
DATE MAILED: 11/16/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/817,375

Applicant(s)

YAMAUCHI, TAKUMI

Examiner

Marc Jimenez

Art Unit

3726

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) 9-11 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 8/5/04, 4/2/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Group I in the reply filed on 8/29/05 is acknowledged.
2. Claims 9-11 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim.

Claim Objections

3. Claims 1 and 8 are objected to because of the following informalities: in lines 1-2 of claims 1 and 8 "a heat exchanger tube obtaining tubes of predetermined lengths" appears incomplete, limitations such as "comprising", "consisting", etc. should be included. Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. **Claims 1-6 and 8** are rejected under 35 U.S.C. 102(b) as being anticipated by Murakami (GB2203677).

Murakami teaches obtaining tubes of predetermined lengths by a step of forming cutting grooves **45** in advance in a strip material **25** at predetermined intervals, a step of rolling the strip material into a tubular shape to form a continuous tube (figure 1), and a step of separating the continuous tubes (**55** figure 52) at the cutting grooves by applying external force to parts of the continuous tube, wherein, when forming the cutting grooves **45** in advance in the strip material, thin parts and thick parts are formed in the cutting grooves (see cross section in figure 2 where there are clearly thin parts and thick parts in the cutting grooves, the thinnest part is at the thinnest portion of the groove **45** and the thicker parts are at the ramps of the grooves **45**).

6. **Claims 1-6 and 8** are rejected under 35 U.S.C. 102(b) as anticipated by Yoder or, in the alternative, under 35 U.S.C. 103(a) as obvious over Yoder in view of Murakami.

Yoder teaches obtaining tubes of predetermined lengths by a step of forming cutting Grooves **B** in advance in a strip material **A** at predetermined intervals, a step of rolling the strip material into a tubular shape to form a continuous tube (figure 13), and a step of separating the continuous tubes (figure 52) at the cutting grooves by applying external force to parts of the continuous tube, wherein, when forming the cutting grooves **A** in advance in the strip material, thin parts and thick parts are formed in the cutting grooves (see cross section in figure 25 where there are clearly thin parts and thick parts in the cutting grooves). Note that thick parts are near the side edge parts of the strip of material see figure 24. There are thick parts shown in figure 24 that will be bent to form the two side edges of the tube. The hollow body formed is considered a heat exchanger tube because heat exchanger tubes are hollow bodies. Alternatively, if the bodies of Yoder cannot be considered a heat exchanger tube, Murakami teaches that it is known to make

Art Unit: 3726

heat exchanger tubes out of metal. Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have made the tube of Yoder into a heat exchanger tube, in light of the teachings of Murakami, in order to provide a tube effective for exchanging heat.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. **Claim 7** is rejected under 35 U.S.C. 103(a) as being unpatentable over Yoder in view of Nordquist (US2444463).

Yoder teaches the invention cited with the exception of having at least four rollers arranged in a zigzag configuration.

Nordquist teaches at least four rollers **76** (figure 3) arranged in a zigzag configuration.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have provided the invention of Yoder with a zigzag configuration, in light of the teachings of Nordquist, in order to facilitate breaking of the tubes into individual pieces.

9. **Claim 7** is alternatively rejected under 35 U.S.C. 103(a) as being unpatentable over Yoder in view of Murakami as applied to claim 1 above, and further in view of Nordquist.

Yoder/Murakami teach the invention cited with the exception of having at least four

Art Unit: 3726

rollers arranged in a zigzag configuration.

Nordquist teaches at least four rollers **76** (figure 3) arranged in a zigzag configuration.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have provided the invention of Yoder/Murakami with a zigzag configuration, in light of the teachings of Nordquist, in order to facilitate breaking of the tubes into individual pieces.

10. **Claim 7** is rejected under 35 U.S.C. 103(a) as being unpatentable over Murakami in view of Nordquist (US2444463).

Murakami teaches the invention cited with the exception of having at least four rollers arranged in a zigzag configuration.

Nordquist teaches at least four rollers **76** (figure 3) arranged in a zigzag configuration.


Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have provided the invention of Murakami with a zigzag configuration, in light of the teachings of Nordquist, in order to facilitate breaking of the tubes into individual pieces.

Contact Information

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marc Jimenez whose telephone number is (571) 272-4530. The examiner can normally be reached on Monday-Friday. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3726

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Marc Jimenez
Acting SPE
Art Unit 3726
11/14/05

MJ